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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/576,394 | 05/19/2006 | James Rouvelle | MURPHY : 001 | 4462 |
| 61530 7590 05/23/2007 KAREN B. TRIPP, ATTORNEY AT LAW P.O. BOX 1301 HOUSTON, TX 77251 | | | EXAMINER WARREN, DAVID S | |
| | | | ART UNIT 2837 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,394

Applicant(s)

ROUELLE ET AL.

Examiner

David S. Warren

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 8, 10, 16, 17, 20 – 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Radice (4,843,275).

Regarding claims 1 and 23 - 25, Radice discloses the use of a device capable of responding to an outside stimulus comprising a volume (the interior of fig. 6), conductive circuitry coupled to the volume (elements 16, 24, 22, 38, 40, 42, etc.) suitable for conducting charge accumulated on the volume in response to the outside stimulus (the Radice device is a microphone, it responds to sound pressure impinging on the surface of the balloon and the piezoelectric elements accumulate charge in response to stimulus), feedback circuitry (22, 24), and feedback driven by the drive signal indicative of the outside stimulus (see last paragraph col. 3). Regarding claim 2, Radice uses a balloon (see first sentence of Abstract). Regarding claim 3, the piezo elements are capable of "sustaining and transferring electrical signals." Regarding claim 4, electrode piezo element 40 is located within the balloon's volume. Regarding claim 5, electrode piezo element (42) as well as elements 16, 22, and 24

are located outside the volume. Regarding claim 6, virtually any object is capable of resonating (here, resonating is defined as sympathetic response to sound pressure). Regarding claim 7, figs. 1 and 2 of Radice show regions in contact with the piezoelectric elements, these are deemed to be "suitable for creating a conductive signal path." Regarding claim 8, while Radice is silent to any oscillator circuitry, Radice clearly discloses the use of RF transmitter and receivers, each would inherently possess an oscillator (see col. 3, lines 55 - 57). Regarding claim 10, Radice discloses the use of an amplifier (see last paragraph col. 3). Regarding claims ^{and 21} 16, Radice's invention is a microphone for detecting sound (sound is synonymous with noise). Regarding claim 17, the microphone of Radice detects ambient sound - ambient sound will naturally contain changes in volume and frequency. Regarding claim 20, as stated supra any object is capable of resonating (for definition of resonating, see remarks supra) [Note: Radice also discloses that a microphone can also be used as a sound generator (col. 1, lines 21 - 24). Regarding claim 21, the Examiner maintains that any perturbation of pressure (as from sound) impinging on the surface of Radice's volume, will affect the pressure within the volume, since the balloon has a flexible membrane.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2837

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 11 – 15, ~~18~~ and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radice in view of Hunter (4,440,059).

The teachings of Radice have been discussed supra with respect to independent claims 1 and 23 - 25. Radice does not disclose the use of providing feedback to light, color, or odor producing means. Regarding claim 9, Hunter discloses the use of turning on (switching on and presumably off) a light (col. 1, paragraph 3). Regarding claim 11, the amplifier (19) is an operation amplifier (col. 5, paragraph 3). Regarding claim 12, the use of one watt output power is deemed to be an obvious matter of design choice - the Applicant has not shown why one watt is critical. The output from Hunter (from the microphone) and from Radice (from the piezo elements) is deemed to be functionally equivalent to that of Applicant's one watt. Regarding claims 13, 14, and 15, Hunter discloses the use of different color lights to be used in the invention (col. 1, paragraph 3). Regarding claim 19, pH is deemed to be an indication of H⁺ atoms, these atoms with a positive charge will interact with the charge built up due to the piezoelectric elements of Radice. Therefore, the Examiner maintains that a change in pH (i.e., a supply of positive ions) will be an outside stimulus capable of providing a feedback signal. It would have been obvious to one of ordinary skill in the art to combine the teachings of Radice and Hunter to obtain a sound (i.e., outside stimulus) activated balloon capable of controlling light and color. The motivation for

making this combination is to provide an entertaining amusement device.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Radice in view of Hunter and in further view of Sigalov (5,017,770).

The teachings of Radice and Hunter have been discussed supra. Neither Radice nor Hunter disclose the use of generating an odor in response to an outside stimulus.

Sigalov discloses the use of generating odor (and noise and light, color, etc.) in response to a stimulus (see col. 11, lines 17 - 28). It would have been obvious to one of ordinary skill in the art to combine the teachings of Radice, Hunter and Sigalov to obtain a odor generating device responsive to sound (or any outside stimulus). The motivation for making this combination is identical to Sigalov's: to produce an entertainment and/or amusement device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'D. S. Warren', with a long horizontal flourish extending to the right.

Dsw

DAVID S. WARREN